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#### CERTIFICATE OF HAND DELIVERY

I hereby certify that this paper is being delivered by hand to the U.S. Patent Office in accordance with 37 CFR § 1.6(b), addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on the date indicated.

Name

1ch 4, 2002

Date

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of: L. Rambhatla et al.

Serial No.: 10/001,267

Filing Date: October 31, 2001

For: PROCESS FOR MAKING HEPATOCYTES

FROM PLURIPOTENT STEM CELLS

Art Unit: 1632

Examiner: (unassigned)

TECH CENTER 1500/2909

### PRELIMINARY AMENDMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Applicants understand that this application has not yet been examined on the merits. Accordingly, please enter the enclosed amendments and remarks into the application, pursuant to 37 CFR § 1.115(b)(1).

PATENT 10/001,267 Docket: 093/004p

#### **AMENDMENTS**

Please delete the current TITLE of the application and replace it with the following:

# PROCESS FOR MAKING HEPATOCYTES FROM PLURIPOTENT STEM CELLS

Please delete the priority information on page 2, lines 13-18, and replace it with the following:

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This application is a continuation-in-part of USSN 09/872,182, filed May 31, 2001; and International Patent Application PCT/US01/13471, filed April 26, 2001, which designates the U.S. and was published as WO 01/81549 on November 1, 2001. This application also claims priority to U.S. provisional patent application 60/200,095, filed April 27, 2000. The three priority applications and U.S. utility application 09/718,308 are hereby incorporated herein by reference in their entirety.

Please cancel claims 1-12 without prejudice, and replace them with the following new claims:

- 13. A method for producing differentiated cells from primate pluripotent stem (pPS) cells, comprising culturing the pPS cells or their progeny in a medium containing a histone deacetylase inhibitor, until at least ~60% of the cultured cells have at least three of the following characteristics:
  - antibody-detectable expression of  $\alpha_1$ -antitrypsin (AAT);
  - antibody-detectable expression of albumin;
  - absence of antibody-detectable expression of α-fetoprotein;
  - RT-PCR detectable expression of asialoglycoprotein receptor (ASGR);
  - · evidence of glycogen storage;
  - evidence of cytochrome p450 activity;
  - · evidence of glucose-6-phosphatase activity; or
  - the morphological features of hepatocytes.
- 14. The method of claim 13, wherein at least about 60% of the cells have at least five of said characteristics.

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